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ABSTRACT

This booklet is intended to help mainstreamed mentally retarded, emotionally disturbed, or learning disabled high school students acquire a basic understanding of the responsibilities and working conditions of secretaries and clerk typists and to practice basic math skills necessary in the occupation. The first section provides a brief introduction to the occupation by focusing upon those job tasks of a secretary/clerk typist with which the student is likely to be familiar. The next two sections deal with the work environment of the typical secretary/clerk typist and the training, education, and experience needed for the occupation. Exercises addressing basic math skills used by secretaries/clerk typists are provided. Various suggestions are listed for students interested in further exploring the occupation of secretary/clerk typist. A glossary and answer sheet conclude the booklet. (MN)

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MATH on the job

Secretary/Clerk Typist

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MATH ON THE JOB:

SECRETARY/CLERK TYPIST

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MATH on the job

Secretary/Clerk Typist

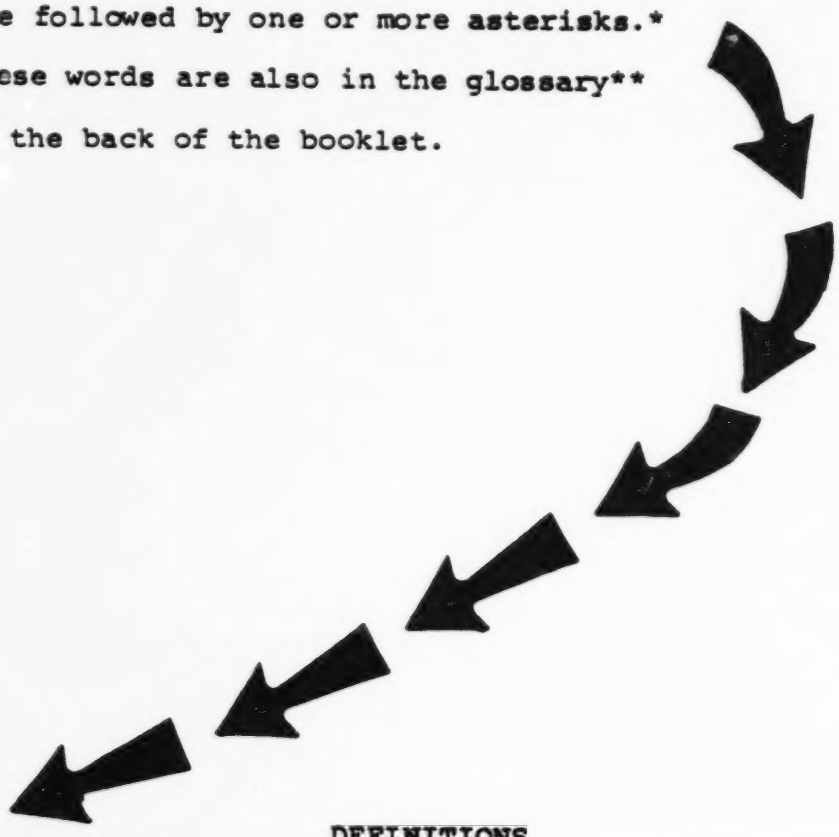
In this booklet, you can--

- find out what a secretary/clerk typist does
- see how a secretary/clerk typist uses math
- get a chance to use math as a secretary/clerk typist
- find out the types of things a secretary/clerk typist needs to know
- find out what courses, training, and experience you need to become a secretary/clerk typist

SPECIAL WORDS USED IN THIS BOOKLET

Workers in many jobs use special words or special meanings for words. Learning these words helps you to learn about a job.

You will find some of these special words in this booklet. When these words, and some hard words, are used for the first time, they are followed by one or more asterisks.* These words are also in the glossary** at the back of the booklet.



DEFINITIONS

*An asterisk (*) is a symbol that tells you to look at the bottom of the page for the meaning, or definition, of the word.

**A glossary is a list of words with their meanings.

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HAVE YOU EVER...

- answered the telephone and written down messages?
- typed a letter?
- sorted the mail?
- made **reservations*** for dinner?
- given directions?

If you have, then you have some idea about the work of a secretary/clerk typist. In this booklet you will learn about the work of a secretary/clerk typist. You will also learn how math is important to do the job.

DEFINITION

*Reservations are arrangements made ahead of time. Reservations often are made by telephone for a room in a hotel, a table for dinner, a seat on an airplane, or a ticket for a play.

WHAT DOES A SECRETARY/CLERK TYPIST DO?

As a secretary/clerk typist, your main task is to help your boss do his or her job. How does a secretary/clerk typist do this? As a secretary/clerk typist, you--

- type letters and reports
- answer the telephone and take messages
- give information to callers
- sort and route mail*
- file letters, records, and reports
- schedule appointments
- greet visitors
- place outgoing calls
- make travel arrangements and reservations

DEFINITION

*To <u>route mail</u> is to send and direct letters or packages received by your office to the right employees. To do this, you may have to open and read the letters.

A secretary/clerk typist uses math on the job every day. As a secretary/clerk typist, you--

- add, subtract, multiply, and divide
- use whole numbers, fractions, decimals, and percents
- estimate and measure time and space
- make calculations

A secretary or clerk typist uses math to proofread* numbers.

EXAMPLE

As a secretary or clerk typist, your boss may give you a report to type. The report may contain many numbers. It is your job to make sure that you type the numbers correctly. Look at the numbers in the two columns below. The numbers in Column 2 should be the same as the numbers in Column 1. Can you find any mistakes?

	Column 1	Column 2
A.	468,321	468,321
B.	235,406	253,406
C.	889,208	889,280

Did you find the mistakes on lines B and C?

NOW YOU TRY IT

Practice Exercise A

Look at the numbers in the two columns. The numbers in Column 2 should be the same as the numbers in Column 1. On a piece of paper, write "yes" if the numbers are the same. Write "no" if the numbers are different.

	Column 1	Column 2
1.	333	353
2.	$756.43	$756.34
3.	$8,903.21	$8,903.21
4.	1,000,002	1,000.002
5.	$13,874.12	$31,874.12

DEFINITIONS

*To **proofread** is to check and review typed pages for any errors.

A secretary or clerk typist uses math to estimate and measure time and space.

EXAMPLE

A secretary or clerk typist estimates how long it will take to type something. A secretary or clerk typist may also estimate how many pages long a report or letter will be.

Assume that you type 75 words per minute. Your boss has a 1,500 word report to be typed. To estimate how long it will take you to type the report, divide the total number of words by the words you can type each minute:

1,500 words ÷ 75 words per minute = 20 minutes

Assume that 300 words will fit on a page. To estimate how many pages you will need, divide the total number of words by the number of words for each page:

1,500 words ÷ 300 words per page = 5 pages

The report will be 5 pages long.

↓ NOW YOU TRY IT

Practice Exercise B

6. Chris can type 50 words per minute. How many minutes will it take Chris to type a 2,000 word report?

7. Pat can type 45 words per minute. How many minutes will it take Pat to type 225 words?

8. At 2:00, Terry's boss gives Terry a 5,000 word report to type and says it has to be typed at 3:00. Terry can type 70 words per minute. Can Terry type the report in time?

9. Lee's boss gives Lee an 8,200 word report to type. If almost 300 words will fit on a page, how many pages will Lee need?

10. Lee typed 65 words per minute for 30 minutes. How many words did Lee type?

A secretary or clerk typist uses math to set margins on the typewriter and center titles on the page.

EXAMPLE

Some typewriters allow 12 characters or spaces per inch and a total of 102 spaces per line. These are called elite typewriters. Other typewriters allow 10 spaces per inch and a total of 84 spaces per line. They are called pica typewriters.

To set the margin on the left side of the page, move the margin guide to the correct number. Where do you set the left-side margin guide on an elite typewriter if you want a one-inch margin? Count the number of spaces that equal one inch. Set the margin guide at 12 spaces.

To set the margin on the right side of the paper, subtract the number of spaces you need for the margin from the total number of spaces in the line. Where do you set the right-side margin guide on an elite typewriter if you want a one-inch margin? Subtract 12 from 102. Set your margin guide at 90.

NOW YOU TRY IT

Practice Exercise C

11. Where do you set the left-side margin guide on an elite typewriter if you want a 1-1/2" margin?

12. Where do you set the right-side margin guide on an elite typewriter if you want a 1-1/2" margin?

13. Where do you set the right-side margin guide on an elite typewriter if you want a 2" margin?

14. Where do you set the left-side margin guide on a pica typewriter if you want a 1-1/2" margin?

15. The right-side margin guide on a pica typewriter is set at 69. How many inches will the margin be?

A secretary or clerk typist uses math to prepare payroll, travel request, expense and other types of forms.

EXAMPLE

Sometimes, your boss will give you forms to complete. You may be asked to make calculations and put the correct numbers on the forms. Let's assume you are asked to complete the following invoice.

Quantity	Stock Number	Title	Cost	Amount
45	0463	The Red Badge of Courage	$2.40	?
20	5211	Moby Dick	$2.90	?
15	1783	The Wizard of Oz	$5.60	?
		Grand Total		?

To figure the amount for the first item, multiply the amount in the QUANTITY column by the amount in the COST column (45 x $2.40) The total is $108.00. The amount you would write in the AMOUNT column is $108.00.

NOW YOU TRY IT

Practice Exercise D

16. In the example above, how much do 20 copies of Moby Dick cost?

17. A customer is billed $17.50 for 5 copies of The Deer Hunter, $43.50 for 15 copies of Moby Dick, and $310.00 for 100 copies of The Call of the Wild. What is the total amount that the customer owes?

WHERE DOES A SECRETARY/CLERK TYPIST WORK?

A secretary/clerk typist could work in many different offices. You may work in such places as--

- an insurance office
- a school office
- a hospital office
- a hotel
- a bank
- a manufacturing plant
- a department store
- a doctor's office
- a lawyer's office

Where would you like to work?

As a secretary/clerk typist, you will work with many people. You may have more than one boss. You will work with other people in your office. You may have frequent contact with customers and other business people. These people will depend on you to do your job. You always should be--

- clean and neat
- on time for work
- friendly and cooperative
- polite

A secretary/clerk typist uses many office machines. As a secretary/clerk typist, you may operate--

- manual, electric, or electronic typewriters
- telephones
- **calculators***
- copying or duplicating machines
- **dictating machines****
- **postage meters*****
- word processing equipment
- computers

You may use either a few machines or many machines. It all depends on the number of tasks you do, the size of the office, and your skills.

There are many types of secretary and clerk typist jobs. Examples are--

- Legal secretary. A legal secretary is a person who types, files, and makes and receives calls for a lawyer. The legal secretary also prepares special papers, such as deeds and wills, and may assist lawyers with legal research. A legal secretary must know legal terms so that the words and phrases can be used correctly.

DEFINITIONS

*Calculators are machines you can use to figure out the answers to math problems.

**Dictating machines are special tape recorders used to record oral directions for typing, such as letters. A secretary/clerk typist can listen to the recorded voice to type a copy of what is said.

***Postage meters are machines that stamp the correct amount of postage on an envelope or package. Some postage meters even seal the envelope for you.

- Medical secretary. A medical secretary is a person who types, files, and makes and receives calls for medical personnel. A medical secretary must know medical terms so that the words and phrases can be used correctly.

- Order clerk. An order clerk processes orders for material or goods. Orders are received by the mail, telephone, or personally from customers. The order clerk may write or type order forms and invoices.

- Dispensary clerk. A dispensary clerk compiles reports and types prescription data on labels. Dispensary clerks work in hospital pharmacies.

- Word processor. Sometimes a secretary or clerk typist uses word processing equipment. The word processor can see the typed information on a screen similar to that of a television set. Setting margins, backspacing, and lining up letters are done by the machine. You can quickly correct, add, or remove information on the screen and then print the final copy on paper. You need special training to be a word processor.

IF YOU ARE INTERESTED IN

THE WORK OF A SECRETARY/CLERK TYPIST

AND WOULD LIKE TO KNOW MORE,

READ ON

WHAT TRAINING, EDUCATION, AND EXPERIENCE DO YOU NEED TO BECOME A SECRETARY/CLERK TYPIST?

What kind of secretary/clerk typist would you like to be? What type of office would you like to work in? The answers to these questions can make a difference in the training, education, and experience you need to become a secretary or clerk typist.

While you don't need much training to do the job of a secretary/clerk typist, you should be a high school graduate. And you must know how to type. You probably will receive some training on the job. But you can get a much better job and higher salary if you learn about office work from classes or other jobs.

A secretary/clerk typist needs to know how things in an office work. As a secretary or clerk typist, you need to know how to--

- operate office machines
- read and write
- spell, use proper grammar, and alphabetize
- do arithmetic
- type
- do paperwork neatly and without mistakes

A secretary sometimes needs to know how to take shorthand. You need to be able to take shorthand at 90 words per minute and type 65 words per minute. Sometimes, a secretary also needs to know how to use word processing equipment. A clerk typist needs to know how to type 45 words per minute and use dictating machines.

The best way to learn these things is to take business and office procedures classes at your high school. Some employers want a secretary or clerk typist to get additional training at a college or business school. Your local vocational education center or community college should offer courses that will help you.

If you want to be a special type of secretary or clerk typist, such as a legal secretary or word processor, you must have special training. You also may need experience in working in an office.

Taking every chance to learn new skills and tasks will help you get a better job and a higher salary. Showing that you have math skills will also help you.

DO YOU WANT TO DO MORE SECRETARY/CLERK TYPIST'S MATH?

Practice Exercise E

Look at the addresses in the two columns. The addresses in Column 2 should be the same as the addresses in Column 1. On a piece of paper, write "yes" if the addresses are the same. Write "no" if the addresses are different.

	Column 1	Column 2
18.	135 Water Street	1135 Water Street
19.	16002 Elm Drive	1602 Elm Drive
20.	1303 Main Street	1303 Maine Street
21.	7832 Lincoln Avenue	7832 Lincoln Avenue
22.	10006 Chestnut Way	10006 Chestnut Way
23.	1688 South Hope Avenue	1655 South ope Avenue
24.	9826 Broad Road	9826 Broad Road
25.	4588 High Street	4588 High Street
26.	2349 Walnut Drive	2394 Walnut Avenue

Practice Exercise F

27. Pat can type 65 words per minute. How many minutes will it take Pat to type a 3,500 word report? (Round the result to the next highest minute).

28. Terry can type 85 words per minute. How many minutes will it take Terry to type 2,295 words?

29. At 10:00 Tony's boss gives Tony a 3,500 word report to type and says it has to be typed by 12:00. Tony can type 75 words per minute. Can Tony type the report in time?

Practice Exercise G

30. Where do set the left-side margin guide on a pica typewriter if you want a 1/2" margin?

31. Where do you set the right-side margin guide on an elite typewriter if you want a 1/2" margin?

32. Where do you set the right-side margin guide on an elite typewriter if you want a 3" margin?

33. Where do you set the left-side and right-side margin guides on an elite typewriter if you want a 2-1/2" margin on each side?

34. The left-side and right-side margin guides on a pica typewriter are set at 20 and 64. How many inches will the margin be?

Practice Exercise H

Copy and complete the following weekly sales report of the ABC Insurance Company.

		Cash Sales	Charge Sales	Total
35.	Auto Insurance	$ 483.12	$ 792.57	?
36.	Home Owners Insurance	318.90	925.31	?
37.	Life Insurance	273.81	764.66	?
38.	Health Insurance	361.19	1,018.92	?
39.	Disability Insurance	101.15	253.18	?
40.	Dental Insurance	94.18	186.34	?
41.	Renter's Insurance	92.12	105.99	?
42.	Business Insurance	2,053.99	4,887.63	?
43-45.	TOTALS	?	?	?

DO YOU WANT TO EXPLORE SOME MORE?

1. Practice putting names in alphabetical order. Put the names of your classmates in alphabetical order. Do you know why it is useful to be able to alphabetize names and words quickly? Ask your teacher, secretaries, and clerk typists how alphabetizing is useful.

2. Get an appointment book or calendar. Write down appointments, such as hairdressers', dentists', or doctors' appointments. Keep a record of the date and time.

3. Look in the newspaper for any job ads for secretaries and clerk typists. What types of offices need secretaries or clerk typists? How much do the jobs pay? What experience do you need to apply for the jobs? What skills do you need?

4. Are you interested in other clerical or office jobs?

   - Receptionists receive all telephone calls coming into the office. They forward the calls to the appropriate person or take a message. Receptionists also greet all visitors to the office.

   - File clerks are responsible for filing office correspondence. They also get correspondence from the files. File clerks make sure that the files are neat and orderly.

   - Mail handlers receive and sort the mail. They also deliver the mail to the correct people. Mail handlers sometimes are responsible for putting the correct postage on mail going out of the office.

   - Office machine operators run the various office machines. For example, copying machine operators do all the copying on the copy machine, fill the paper trays, and make sure the machine has ink. They also fix any small problems if the machine does not work correctly.

You can do these jobs without all the math skills listed in this booklet, but you can do a better job if you have math skills. You may get a chance to move up to a better job if you can show that you can do your job well and that you can do the math needed on the job.

GLOSSARY

Asterisk (*): a mark that tells you to look at the bottom of the page for the meaning, or definition, of the word.

Calculator: a machine you can use to figure out the answer to math problems.

Dictating machines: special tape recorders used to record oral directions and materials for typing, such as letters. A secretary/clerk typist can listen to the recorded voice to type a copy of what is said.

Glossary: a list of words with their definitions.

Postage meter: a machine that stamps the correct amount of postage on an envelope or package. Some postage meters even seal the envelope for you.

Proofread: to check and review typed pages for any errors.

Reservations: arrangements made ahead of time. Reservations often are made by telephone for a room in a hotel, a table for dinner, a seat on an airplane, or a ticket for a play.

Route mail: to send and direct the letters received by your office to the right employees. To do this, you may have to open and read specific letters.

ANSWER SHEET

Practice Exercise A

1. no
2. no
3. yes
4. no
5. no

Practice Exercise B

6. 40 minutes
7. 5 minutes
8. no
9. 28 pages
10. 1,950 words

Practice Exercise C

11. 18
12. 84
13. 78
14. 15
15. 1-1/2"

Practice Exercise D

16. $58.00
17. $371.00

Practice Exercise E

18. no
19. no
20. no
21. yes
22. yes
23. no
24. yes
25. yes
26. no

Practice Exercise F

27. 54 minutes
28. 27 minutes
29. yes

Practice Exercise G

30. 5
31. 96
32. 66
33. 30 and 72
34. 2"

Practice Exercise H

35. $1,275.69
36. $1,244.21
37. $1,038.47
38. $1,380.11
39. $354.33
40. $280.52
41. $198.11
42. $6,941.62
43. $3,778.46
44. $8,934.60
45. $12,713.06